

Center For Standards  
1996

February 13,

Memorandum for Distribution

SUBJECT: Minutes-Symbology Management Committee (SSMC) Meeting,  
24-25 January 1996.

1. **Introduction.** The Symbology Standards Management Committee (SSMC) meeting was called to order at 0830 hours, 24 January 1996, by the Chairman, Cdr. Rocky Wells, Syntax and Symbology Division, Center for Standards (CFS), Joint Interoperability and Engineering Organization (JIEO), Defense Information Systems Agency (DISA). The following member organizations were represented:

- U.S. Army (USA)
- U.S. Navy (USN)
- U.S. Air Force (USAF)
- U.S. Marine Corps (USMC)
- Chairman, Joint Chiefs of Staff (CJCS)
- Defense Mapping Agency (DMA)

The roster of attendees is provided in enclosure 1 and a member list is provided in enclosure 2.

2. **Agenda.** The Chairman introduced the proposed agenda which the committee accepted. The Chairman asked that the attendees introduce themselves and indicate who was the spokesperson for each agency.

3. **Approval of previous meeting minutes.** The Chairman presented the 7 September 1995 meeting minutes and asked if any member had recommended changes. No changes were offered, and the Naval Command Control and Ocean Surveillance Center (NCCOSC) moved that the minutes be approved. The DMA seconded the motion. The vote was unanimous to approve the minutes without change.

4. **SSMC Charter review.** A periodic review of the SSMC Charter was accomplished in accordance with the charter and presented by JIEO. NCCOSC requested to be added to the list of Associate Members. The USMC requested to have the Joint Warfighting Center added to the list of Associate Members. It was agreed that the charter would be accepted upon removal of para. 7e. The vote was unanimous. The Chairman agreed to forward the charter to the Standards Coordinating Committee for approval (**ACTION ITEM 1**). After the SSMC

Charter is approved by the Standards Coordinating Committee, it will be forwarded to all the members under separate cover.

**5. Action item overview.** The Chairman gave a brief overview of the action items and issues that needed to be addressed at the current meeting.

(a) Icon ID structure. The current Icon ID structure is not robust enough to accommodate all objects.

(b) Hierarchy. Since the Hierarchy and Icon ID are related, he suggested that the committee concentrate on the methodology of the coding scheme and not the detailed specifics of the code itself.

(c) Icons. The Chairman verbalized the requirement differences among the services. USAF and USN systems require symbols which can be easily differentiated, and USMC and USA systems require symbols which are easily built. He noted that trying to accommodate all of the services' requirements in Version 1 culminated in a non-standard solution.

(d) Frame shapes. The Chairman suggested representing all equipment symbols with the four basic affiliation frames (circle, diamond, square, and quatrefoil) and depicting all units, regardless of affiliation, with the rectangle frame.

(e) Validation testing. The Chairman noted that DISA funding for additional validation testing was not available and that CFS was not a test sponsor. A service(s) needed to sponsor any further validation testing if additional testing was required.

(f) Defacto standard. The Chairman noted that Military Standard (MIL-STD) 2525 is the defacto standard because it is in the Department of Defense Index of Specifications and Standards (DODISS) registry. He also noted that it is being incorporated into the Global Command and Control System (GCCS).

**6. Icon ID coding issue.** The issue centered on the need to accommodate a more detailed set of symbols. The current icon coding structure needs revision to be able to accommodate all of the USA and the Army Intelligence Fusion Office symbol needs. A structure created by the Army Intelligence Fusion Office will accommodate all additional symbols. However, the coding structure on the table neglects the already established hierarchy. At issue is whether this scheme will support all users.

(a) The Chairman offered that the Army Intell Fusion Office methodology was more robust and capable and opened discussion.

(b) Army PEO Missile Defense representatives explained that the Air Defense community had some concerns and provided a briefing (enclosure 3). The major concern of

the Army Air Defense community was tactical systems having to comply with MIL-STD-2525.

Air Defense community uses MIL-STD-1477B symbology. Different frame shapes and data fields exist in the two standards.

(c) Discussion continued on this subject throughout the day and the next morning. The following points were made:

1. There is value in a hierarchy coding system because it supports object oriented programming and gives more information about an object due to its inheritance.

2. Testing is still necessary. The Joint Staff was requested to investigate “tasking” the services and finding money to put test software into GCCS. (**ACTION ITEM 2**)

3. The ground hierarchy needs to be completed. The Army was asked to provide it by 29 February 1996 (**ACTION ITEM 3**).

4. The Navy and Army agreed that a combination of Military Integrated Intelligence Database System/Integrated Database and present hierarchy might work. The Navy will work the hierarchy/Icon ID and provide results to the Chairman by 15 March 1996 (**ACTION ITEM 4**), and JIEO will provide a glossary of all icons and their associated IDs (**ACTION ITEM 5**). To complete this, services must provide additional symbols to the Chairman by 30 March 1996 (**ACTION ITEM 6**).

5. Certification Annex was discussed briefly. NCCOSC suggested that the technical implementation testing facets of the MIL-STD (size rendering, line thickness, and related specifications) be put in an Appendix or handbook.

6. To facilitate processing change proposals for Version 2, a configuration management Working Group was formed and will meet at 0800 hours on 6 February 1996 to work on the 164 comments provided in the SSMC materials package (**ACTION ITEM 7**).

7. **Icon framing issue.** This issue stemmed from the USA and USMC’s operational practice of “tracking” units, while the USAF and USN (in the air realm) “track” equipments (missiles, flights of aircraft, etc.). Version one of MIL-STD-2525 accommodates rectangles as friendly land/ground equipment and units. The USA would like to depict helicopters as units without the bottom of the rectangle filled in.

(a) “Unknowns” depicted as squares can be confused with rectangles. So there is a potentially dangerous situation where an unknown could be treated as if it were a friend when in fact it is an enemy. To continue with this paradigm results in services depicting the same objects with different symbols possibly in the same facility.

(b) The Chairman proposed a compromise where the rectangle could be used for all units; a double border could be used to indicate hostile affiliation. The USA refused the double border for enemy units. The USMC refused the diamond. The Chairman recommended creating a new table for equipment in which the rectangle would not be used, and the circle would replace the rectangle in Table 1 of Version 1 of the standard.

(c) NCCOSC proposed a human factors consistent technical solution to the frame shape issue.

(d) Consensus was reached on the need for detailed technical and operational testing.

(e) The Army Command and General Staff College (CGSC) presented a briefing on Ground hierarchy (enclosure 4).

8. **MIL-STD-2525 validation.** Mr. Thom Beal, Logicon JIEO support, provided a briefing on the results of the CD-ROM validation effort (enclosure 5). He noted that only 7 responses were received from the over 190 validation packages that were distributed. No actual validation testing had been conducted, and the closest thing to validation testing was the work done by NCCOSC which used data gained from testing Standardization Agreement (STANAG) 4420 symbology as it might apply to Version 1.

9. **Military Standards Update.** Mr. Dave Sweet, CFS Standards Assistance Directorate, provided an update briefing on the activities of the Defense Standards Improvement Council (DSIC) (enclosure 6). He noted that all standards preparers have to convert their existing standards to Postscript Description Language/Postscript Definition Format (PDL/PDF) format if the standard is to be continued. He noted that the CFS had written a letter for 105 standards, which included MIL-STD-2525, to be designated as interface standards, and their proposal was accepted by Mr Bergman, DSIC Chair. The Chairman noted that MIL-STD-2525 had been added to the DODISS registry. Mr. Sweet explained that it was also a part of the Technical Architecture for Information Management. JIEO agreed to get the word "Interim" officially placed on the front of MIL-STD-2525 (**ACTION ITEM 8**). It was mentioned that it was approved that STANAGs could be cited directly in contracts now, as opposed to having to cite an equivalent United States standard which was the way that it used to be. He noted that standards information can be acquired through the Internet at <http://web1.whs.osd.mil/icdhome/forms.htm>

10. **Next meeting.** Committee agreed that the next meeting would held at Logicon in Reston, VA, on 2-3 April 1996.

Roger Wells, Commander, USN

Chairman, Symbology Standards  
Management Committee

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6 Enclosures

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| 1. Attendee Roster                       | 4. Ground Hierarchy        |
| 2. Member List                           | 5. CD-ROM Validation Brief |
| 3. PEO Missile Defense Concerns Briefing | 6. DSIC Brief              |